Test and Evaluation in the Desert

Sad Tale of a "Rattled" Tester

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Designing, building, and especially testing High Energy Lasers has some interesting moments. As you can probably imagine, these potentially lethal devices must be tested in a manner that minimizes risk. Personnel undertaking such testing must have situational awareness at all times. And the risk does not end with the Directed Energy devices.

Out here in the New Mexico desert, other concerns may focus on a different type of "directed energy" — a fact to which I can readily attest.

Diamondbacks and Mexican Reds

In the past few years, Western Diamondback and Mexican Red rattlesnakes have struck me a total of nine times. One particularly memorable event took place on the morning of June 30, 1998. First, I'll set the scene. Picture it:

We were preparing for the last tracking mission in the Tactical High Energy Laser Fire Control Radar/Command, Control, Communications and Intelligence (THEL FCR/C3I) test series. The Commander's second line of sight or Adjunct Optical Tracking System was being prepared for the missions of the day. Calibrating the system requires a known Infrared (IR) source, located at a distance of at least 10km from the tracker.

At first light I went to a location known as the 11K or Jess Site to establish such an IR source. A power drop from a high voltage line at that location can be used to supply power to the IR source. On the ground is a steel box approximately one meter cube, containing a power supply, voltage regulator, and various other electronic components used to adjust the supply to the IR sources. Two pairs of doors are situated on the box — one on the front and one on the back. The front doors allow the IR source to be seen by the Adjunct Tracker. The back doors allow access to adjust the voltage and current. The front doors are normally left open.

Striking Surprise

On this particular morning, I knelt next to the back of the system and opened the doors to verify the settings. When I opened the doors and looked in, a rattlesnake that had been spending the night on the warm transformer apparently took umbrage at my rude intrusion, striking and hitting me in the left side of the face right below the left eye on the cheekbone.

I stood upright with the snake writhing and still hanging from my face. Not willing to let go, the weight of the snake tore some of the flesh, which started to bleed profusely. A struggle ensued in which I came out the "winner." Finally freeing myself, I verified the settings that I had started out to check, and then proceeded to drive the 20 or so miles back to where the tracker was located. The missions proceeded without further incident, after which I went back to the office.

Earlier, my secretary had quipped, "Did the snake die?" when I first called to report my "snake attack." (She thought I was only kidding.) The look of shock on her face when she saw me, however, was a true Kodak moment.

There was no permanent damage, but alas I did lose the sight in my left eye for a few weeks. (Presumably, the doctors tell me, the bleeding caused by the tearing of the flesh was beneficial in getting rid of most of the venom.)

Safety Among the Snakes

At this point, I must note that *it is against the rules to kill a rattlesnake on federal property.* The correct approach is to call your local Environmental and Safety personnel who catch the snake and transport it (in our case) to the other side of one of the barbed wire fences. (I am not certain, however. I guess the snakes are supposed to recognize the barbed wire as a boundary and slither elsewhere.)

Every program needs a good dose of test and evaluation. Just watch for those small problems that tend to "rear their ugly heads" and take a "bite" out of your test plan. As for 2001 — so far it's been a very good year. No bites — *yet.* But at nine bites and counting, I'm not betting the farm.

Editor's Note: This is a true story. The author welcomes questions or comments on this article. Contact him at *JBirkitt@Millenniumdental.com*

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